

### **ABSTRACT OF THE DISCLOSURE**

Disclosed is an image sensor and optical pointing system using the same. The image sensor is constituted of a plurality of pixels, each of which comprises a photocell for receiving light and generating an analog signal  
5 corresponding to a quantity of the received light, a comparator for comparing the analog signal of the photocell and a reference signal and generating a digital signal having a value of the compared result, and a switch for outputting the digital signal of the comparator. The image sensor performs digital conversion and pre-filtering through the comparator, thus allowing 1-bit digital  
10 signals to be outputted. Further, the optical pointing system can provide a minimized layout area because an A/D converter and a pre-filter having high resolution are not separately required, and can provide a minimized chip size when implemented as a semiconductor integrated circuit.